

IN THE CLAIMS

1. (original): A process for printing a porous substrate comprising ink jet printing a dye and casein onto the substrate to give a print in which the dye and casein are in contact with each other wherein the casein is applied as a composition comprising a liquid medium, the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C.
2. (original): A process according to claim 1 wherein the dye and the casein are printed onto the substrate separately.
3. (currently amended): A process according to claim 1 ~~or 2~~ wherein the dye and casein are printed from different ink jet cartridges or are printed from separate chambers of a one ink jet cartridge.
4. (original): A process according to claim 1 wherein an ink comprising the casein and dye is printed onto the substrate.
5. (original): A process according to claim 1 wherein the casein is printed onto the substrate in a first step and a composition comprising casein and dye is printed onto the substrate in a second step to substantially the same area as the casein.
6. (currently amended): A process according to ~~any one of the preceding claims~~ claim 1 wherein the substrate has high levels of voids within its structure.
7. (currently amended): A process according to ~~any one of the preceding claims~~ claim 1 wherein the substrate comprises filler and binder in a weight ratio of at least 2:1.
8. (original): A process according to claim 7 wherein the filler is clay, calcium carbonate, magnesium carbonate, silica, zeolite, alumina or a combination of two or more thereof.
9. (currently amended): A process according to ~~claims 1 to 5~~ claim 1 wherein the casein is substantially free from di and trivalent metal ions.

10. (original): An ink comprising:

- (i) 0.1 to 10 parts casein calculated on a 100% solids basis;
- (ii) 0.1 to 15 parts dye; and
- (iii) 99.8 to 74.9 parts of a liquid medium;

wherein the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C, all parts are by weight, (i)+(ii)+(iii) add to 100 parts and the ink comprises less than 0.1% by weight of di- and tri-valent metal ions.

11. (original): An ink comprising:

- (i) 0.1 to 10 parts casein calculated on a 100% solids basis;
- (ii) 0.1 to 15 parts dye;
- (iii) 0.0001 parts to 0.1 parts of 1,2-benzisothiazolin-3-one;
- (iv) a liquid medium;

wherein the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C, all parts are by weight, (i)+(ii)+(iii)+(iv) add up to 100 parts and the ink comprises less than 0.1% by weight of di- and tri-valent metal ions.

12. (currently amended): A process according to ~~any one of claims 1 to 8~~ claim 1 wherein the casein and dye are applied to the substrate in the form of an ink according to claim 10 or 11.

13. (original): An ink jet printer cartridge comprising a chamber and a composition according to claim 10 or 11.

14. (currently amended): ~~Use of casein to improve~~ A method of improving the ozone fastness of a dye which comprises contacting the dye with casein.